

ABSTRACT OF THE DISCLOSURE

A radioactive material detection system includes a cargo container monitoring system and a control center. The cargo container monitoring system has a radiation sensor configured to detect radiation over a predetermined or commanded period of time and a
5 transceiver configured to send the information received from the radiation sensor. The control center is in communication with the transceiver of the cargo container monitoring system. The control center is configured to receive data from at least one additional source other than the cargo container monitoring system and to asynchronously analyze the data from the at least one additional source and the information from the radiation sensor, during transit, so as to detect
10 radioactive material in a cargo container.